(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 26 May 2005 (26.05.2005)

(10) International Publication Number WO 2005/046732 A2

(51) International Patent Classification7: C12N 15/87, 15/11

A61K 48/00,

(21) International Application Number:

PCT/US2004/036492

(22) International Filing Date:

3 November 2004 (03.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/516,734

4 November 2003 (04.11.2003)

- (71) Applicant (for all designated States except US): THE UNITED SATES OF AMERICA as represented by THE SECRETARY OF HEALTH AND HUMAN SER-VICES, NIH [US/US]; Office of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WAHL, Sharon, M. [US/US]; 12650 High Meadow Rd., N. Potomac, MD 20878 (US). VAZQUEZ-MALDONADO, Nancy [US/US]; 4450 South Park Avenue, Apt. 1002, Chevy Chase, MD 20815 (US). GREENWELL-WILD, Teresa [US/US]; 19008 Oxcart Pl., Gaithersburg, MD 20886 (US).

- (74) Agent: AUERBACH, Jeffrey, I.; Liniak, Berenato & White, Suite 240, 6550 Rock Spring Drive, Bethesda, MD 20817 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS FOR THE INHIBITION OF HIV-1 REPLICATION

120 100 p24 (ng/ml) 09 08 40 20 0 HIV CDDO DMSO + HIV + HIV

(57) Abstract: This invention relates to methods and compositions for the attenuation of HIV-1 replication in human cells, and especially in human macrophages. The invention particularly concerns the use of inhibitors of P21 (CDKNIA) expression to attenuate such replication. The invention particularly concerns the use of antisense P21 oligonucleotides, siRNA and/or 2-cyano-3,12-dioxooleana-1,9-dien28-oic (CDDO) to attenuate such replication.